IT IS CLAIMED:

1. An isolated polynucleotide capable of encoding a polypeptide having substantial sequence identity to the sequence SEQ ID NO: 2 and characterized by (i) enhanced expression in mammalian central nervous tissue in response to synaptic activation, and (ii) a PDZ-like domain coding region.

2. The isolated polynucleotide of claim 1, wherein said sequence identity is at least about 80%.

3. The isolated polynucleotide of claim 1, wherein said polynucleotide has the sequence SEQ ID NO: 1.

4. An isolated polypeptide, characterized by (i) enriched expression during synaptic activity in mammalian brain, (ii) presence of a PDZ-like binding domain, and (iii) a sequence that is at least 80% identical to SEQ ID NO: 2.

5. The isolated polypeptide of claim 4, which further exhibits an ability to selectively bind to a synaptic membrane protein having a C-terminal peptide region selected from the group consisting of SSSL and SSTL.

6. The isolated polypeptide of claim 4, wherein said sequence identity is at least about 80%.

7. The isolated polypeptide of claim 6, wherein said polypeptide has the sequence SEQ ID NO: 2.

8. A vector which contains a polynucleotide capable of encoding a polypeptide having at least about 80% sequence identity to the sequence SEQ ID NO: 2 and characterized by enhanced expression in central nervous tissue in response to synaptic activation.

9. The vector of claim 8, wherein said polynucleotide has the sequence SEQ ID NO: 1.

10. A method of selecting a compound that interferes with binding of a synaptic activation protein to a cellular binding protein in the mammalian central nervous system, comprising

adding a test compound to a reaction mixture containing (i) an isolated synaptic activation protein having substantial sequence identity to a polypeptide having the sequence SEQ ID NO: 2, (ii) an isolated binding protein to which said synaptic activation protein binds, and (iii) means for detecting

binding between said synaptic activation protein and said binding protein; measuring binding between said synaptic activation protein and said binding protein; and

selecting said compound if the measured binding is greater than or less than binding measured in the absence of said test compound.

11. The method of claim 10, wherein said binding protein is a metabotropic glutamate receptor which includes a sequence selected from the group consisting of SSSL and SSTL.

12. The method of claim 11, wherein said mGluR binding protein is expressed in cells, and said binding between said receptor and said binding protein is measured by measuring phosphoinositidase C (PI-PLC) activity in said cells.